

AMERICAN DENDROBATID GROUP

Newsletter No. 10

July-August 1993

The purpose of the ADG is to develop better communication between Dendrobatid breeders in North America. It is designed by its format and bi-monthly distribution to keep dendrobatid frog breeders in better communication with one another and it is hoped that with this communication we will be able to solve some of the problems which confront us all. This newsletter will appear bimonthly and will cost \$5.00 annually to cover printing and mailing.

Subscriptions, comments, etc. should be sent to Charles Powell (2932 Sunburst Dr., San Jose, CA 95111 Tel.: (408) 363-0926) or Terry Chatterton (P.O. Box 622, Kiaua, CO 80117 Tel.: (303) 621 2442).

Breeding *Dendrobates reticulatus*

Bob Davies

Reprinted with permission from the British Dendrobatid Group Newsletter, No. 16 (March, 1993).

Dendrobates reticulatus is a small (14 to 16 mm) attractive dendrobatid from Peru. The head and back are a distinctive bright orange/red. The legs are covered by a network of black and silver (to white).

We had two females housed in a small vivarium approximately 20 x 14 x 20 inches high (51 x 36 x 51 cm). The back and one side are covered in cork slab. In each of the back corners there is a cork ledge holding a small petri dish covered by a piece of coconut shell. A piece of green plastic (Marks and Spencer's carrier bag) is placed in each petri dish.

The vivarium is furnished with a potting soil substrate covered by gravel and topped with moss. A piece of driftwood for decorative effect is added. One bromeliad (*Guzmania* sp.) and plants such as Creeping Fig (*Ficus pumila*), Snakeskin Plant (*Fittonia*) and Sweetheart Vine (*Philodendron scandens*) complete the furnishings. A terrace formed from cork bark is now covered with moss which has grown quite well in most of the vivarium. Along the front of the vivarium a depression in the gravel forms a shallow pool on the surface of which springtails are often present in large numbers.

Heating is by means of a thermostatically-controlled 40-watt spot bulb beamed through the top glass. An 18 inch tru-lite tube inside the vivarium also provides a little heat. A thermostat cuts out at about 80°F (26°C) but the tube will often raise the temperature to 82°F (27°C). No heat is supplied at night but the temperature usually drops no lower than 68°F (20°C).

We had two frogs for about six months and in May 1992 obtained a third specimen which turned out to be a male. As soon as he was introduced a lot of hectic chasing ensued and a low 'rasping-call' was heard (the call is very low and can only be heard when one is close to the vivarium). On 5 June two eggs were discovered in one of the spawning sites.

The plastic and eggs were removed and placed in a covered petri dish with sufficient water to touch the base of the eggs (approximately 2 mm). Since that clutch others have been laid, sometimes with only 3 days between clutches. The number of eggs has varied from two to six. Six eggs are the result of both females spawning simultaneously. Occasionally all six are close together but usually there is a gap between the two clutches. In the latter case one clutch may not be fertilized. If both clutches are fertilized then the tadpoles tend to be weak and do not make it to metamorphosis. Clutches laid at different times and at intervals of two weeks or so are much more successful.

From egg to tadpole has taken between 10 and 14 days. On occasion they have emerged after only 8 days but these were weak and did not last very long. Total time to metamorphosis varies from 10 to 12 weeks. Tadpoles begin to show the orange coloration at about 5 weeks, just before the rear legs emerge. At metamorphosis froglets measure 7 to 8 mm SVL and still retain some black on the back which disappears soon after. They are fed on springtails graduating to fruitflies.

Dendrobates reticulatus belongs to a group of frogs which in terms of husbandry are mid-way between *D. auratus*, *D. vittatus*, *D. truncatus*, etc in which the eggs can be removed and reared artificially and the egg-feeders such as *D. lehmanni* and *D. histrionicus* which are practically impossible to rear artificially. On two occasions we had heard the male calling but no eggs were seen in the petri dish. We decided that it was a false alarm and possibly the females were having a rest. On the first occasion we later found in the pool a small, almost completely metamorphosed froglet. Four days later two completely metamorphosed froglets emerged from the bromeliad. They had obviously been laid out of sight and cared for by the adult. The froglets were not as big as those raised artificially and only one has survived. On the second occasion no eggs were found after the calling but about ten days later a female was seen transporting tadpoles, one by one, to a bromeliad and we are awaiting their emergence at the time of writing.

Adds: For Sale

Robert Kummelehne (628 Vincent Park #4, Redondo Beach, CA 90277 Tel.: (310) 374-8302) has to move and is offering his collection of adult, breeding dart frogs for sale (write or call for price and availability). The collection include:

6 adults	<i>Dendrobates tinctorius</i> 'Colbolt'
2.2 adults	<i>D. leucomelas</i>
2.3 adults	<i>D. auratus</i> 'Costa Rica'
5, year old juveniles	
1.1	<i>D. reticulatus</i>

Dendrobates imitator

\$65

Charles Nishihara
3271 Pinao St.
Honolulu, HI 96822
(808) 988-3420

Dendrobates auratus 'Costa Rica' \$25

Sean Healy
3140 Savage Rd.
Sarasota, FL 34231

Dendrobates anthonyi

CB juveniles \$30 each or \$25 each for 4 or more

Dendrobates leucomelas

CB juveniles \$45 each or \$40 each for 4 or more

Ed Oshaben
4154 Lincoln Ave.
Willoughby, OH 44094

Dendrobates anthonyi \$30

Sean Eric Malolepsy
5041 Van Buren
Yorba Linda, CA

Max Hernandez (36863 Ash St., Apt. C, Newark, CA 94560 Tel.: (510) 505-0580) has cork bark, grapewood vines, tree-fern fiber and various bromalids for sale. Call for prices.

The Serpent's Egg (1809 Irving St., NW, Washington, D.C. 20010 Tel. (202) 462 9443) has various wild caught frogs for sale including *Dendrobates histrionicus*, *D. lehmanni*, *D. truncatus*, *Phyllobates aurotaenia*, *P. bicolor*, and *Minyobates bombetes*. Write or call for information.

Breeders Exchange

Dendrobates ventrimaculatus 'Y stripped phase'
(male needed)

Max Hernandez
36863 Ash St., Apt. C
Newark, CA 94560
(510) 505 0580

Frogs bred in the USA during 1992

Dendrobates aboreus

Dendrobates azureus

Dendrobates imitator

Dendrobates pumilio (4 forms)

Dendrobates speciosus

Dendrobates ventrimaculatus

Epipedobates tricolor

Dendrobates auratus (3 forms)

Dendrobates histrionicus

Dendrobates leucomelas

Dendrobates reticulatus

Dendrobates tinctorius

Epipedobates azureiventris

Phobabates bassleri

If anyone has additions to this list please contact the Newsletter editor.

New Members

Daniel A. Aguilar (California)
Richard Bireley (California)
Paul Bolognese (New York)
J. Allen Cree (Indiana)
Brian Ferkovich (California)
S. Grenard (New York)
Geoffrey S. E. Hall (Maryland)
Mark Olin (California)
Charles Nishihira (Hawaii)
Curtis Tom (California)
Dr. Kevin Wright (Pennsylvania)

New Literature

Brust, Douglas G., 1993, Maternal brood care by *Dendrobates pumilio*: a frog that feeds its young. *Journal of Herpetology*, 27(1): 96-98.
Duellman, William E. and Wild, Erik R., 1993, Anuran amphibians from the Cordillera de Huancabamba, northern Peru: Systematics, ecology, and biogeography. *Occasional Papers of the Museum of Natural History (The University of Kansas, Lawrence)*, No. 157: 1-53.
Hotle, Doug, 1993, The husbandry and propagation of *Dendrobates auratus* at the Indianapolis Zoo. *Captive Breeding*, 1(3): 4-7, 26-28.

Corrections to Dendrobate species list (from ADG Newsletters, no. 8 and no. 9)

Epipedobates anthonyi is placed in synonymy with *E. tricolor* (this means that *E. anthonyi* is no longer a valid species and should be removed from the above list) by Duellman and Wild, 1993 (see New Literature, above).